

**PERIODIC AERATION IN AN ACTIVATED SLUDGE REACTOR
FOR WASTEWATER TREATMENT**

ABSTRACT

5 A method for treating wastewater. The method includes the steps of flowing the wastewater in the absence of any additional carbon source into a treatment basin in order to form the contents of the treatment basin and treat the wastewater, mixing the contents of the treatment basin, introducing oxygen into the treatment basin for a first predetermined time
10 period of from about 10 to about 120 minutes, stopping the introduction of oxygen into the treatment basin for a second predetermined time period of from about 7.5 to 120 minutes, repeating the steps of introducing oxygen into the treatment basin for a first predetermined time period and stopping the introduction of oxygen into the treatment basin for a second
15 predetermined time period a plurality of times, and flowing the treated wastewater out of the treatment basin into a clarifier, where treated wastewater is separated into clarified liquid effluent and sludge. Also provided is a process for reducing the level of nitrogen compounds in wastewater.

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